

ABSTRACT OF THE DISCLOSURE

A drive signal generating unit sequentially generates a first pulse in the shape of a rectangular wave expanding the capacity of a pressure chamber, 5 a second pulse contracting the capacity of the pressure chamber, a third pulse in the shape of a rectangular wave expanding the capacity of the pressure chamber, and a fourth pulse contracting the capacity of the pressure chamber, as drive signals when an ink droplet 10 is ejected after the capacity of the pressure chamber is changed to be expanded or contracted. When  $1/2$  of a specific vibration period of the ink in the pressure chamber is defined as  $1AL$ , the time interval between the pulse width center of the first pulse and that of 15 the third pulse is set to  $1AL$ , and the time interval between the pulse width center of the second pulse and that of the fourth pulse is set to  $1AL$ .